

EFIC17

P75-PAIN TREATMENT (CONSERVATIVE): PHYSIOTHERAPY**Abstract: 718****HOW TO DEFINE THE SUCCESS OF PHYSIOTHERAPY IN CHRONIC LOW BACK PAIN PATIENTS?**

D. Pires¹, E.B. Cruz², D. Costa³, A.M. Ribeiro⁴, A.C. Vieira⁵, S. Moniz⁶, C. Nunes⁷

¹Escola Superior de Saúde Dr. Lopes Dias - Instituto Politécnico de Castelo Branco, Physiotherapy, Castelo Branco, Portugal

²Escola Superior de Saúde - Instituto Politécnico de Setúbal, Physiotherapy, Setúbal, Portugal

³Hospital Amato Lusitano - Unidade Local de Saúde de Castelo Branco, Physiotherapy, Castelo Branco, Portugal

⁴Santa Casa da Misericórdia de Cardigos, Physiotherapy, Proença-a-Nova, Portugal

⁵Serviço de Medicina Física e de Reabilitação do SESARAM- E.P.E. Madeira, Physiotherapy, Funchal, Portugal

⁶Centro de Medicina e Reabilitação - Reafi, Physiotherapy, Parede, Portugal

⁷Escola Nacional de Saúde Pública - Universidade Nova de Lisboa, Saúde Pública, Lisboa, Portugal

Background and Aims: In literature there are several recommended cutoffs to assess the success of a specific intervention on pain intensity and disability, in chronic low back pain (CLBP) patients. The aim of this study was to determine the cutoffs that most accurately classify CLBP patients who perceived an overall improvement.

Methods: Data from three prospective cohort studies were pooled together. All participants were categorized as having "success"/"non-success" according to their scores on overall ratings of improvement, pain intensity and disability scales, immediately after physiotherapy intervention, and at 3 months follow-up. Binary logistic regression was used to determine odds ratio (OR) regarding the association between overall improvement perception and the success (or not) in different cutoffs to pain intensity (reductions ≥ 15 points, 20%, 30% and 50%) and disability (reductions ≥ 20 points, 20% and 30%). The discriminative capacity of each cutoff was analysed through the area under the curve (AUC).

Results: This analysis integrated the data from 349 participants. All the cutoffs analysed showed a significantly association ($p < 0.01$) with the probability of overall improvement perception. Reductions of $\geq 50\%$ in pain intensity at the end

of the intervention (OR: 5.14; AUC=0.679) and of $\geq 30\%$ after 3 months follow-up (OR: 7.74; AUC=0.733) were the cutoffs that most accurately classify CLBP patients who perceived an overall improvement. Odds ratios for pain intensity cutoffs were generally higher than those for disability.

Conclusions: These findings support the preferential use of percentage reductions in pain intensity to identify the success of physiotherapy in CLBP patients.

Table 1: Odds Ratio to success intervention based on pain intensity cutoffs

		End of the Intervention		3 Months Follow-up	
		OR (IC 95%)	AUC	OR (IC 95%)	AUC
Pain Intensity					
15 Points	No	1	0.644	1	0.705
	Yes	3.27* (2.01;5.30)		5.94* (2.96;11.92)	
20%	No	1	0.641	1	0.682
	Yes	3.36* (2.07;5.45)		4.60* (2.39; 8.83)	
30%	No	1	0.636	1	0.733
	Yes	3.04* (1.89;4.91)		7.74* (3.79;15.83)	
50%	No	1	0.679	1	0.709
	Yes	5.14* (2.96;8.94)		7.45* (3.39; 16.39)	

*p<0,01

Table 2: Odds Ratio to success intervention based on disability cutoffs

		End of the Intervention		3 Months Follow-up	
		OR (IC 95%)	AUC	OR (IC 95%)	AUC
Disability					
20 Points	No	1	0.573	1	0.591
	Yes	3.45* (1.57;7.57)		3.97* (1.47;10.72)	
20%	No	1	0.651	1	0.678
	Yes	3.59* (2.21;5.83)		4.43* (2.31; 8.51)	
30%	No	1	0.627	1	0.646
	Yes	2.86* (1.76; 4.65)		3.43* (1.77; 6.83)	

*p<0,01